40 ABSTRACT OF THE DISCLOSURES

A multimedia optical disk is provided. The multimedia optical disk includes a data area for storing objects which include moving picture data and at least one of audio data and sub-picture data. The multimedia optical disk also includes an index area for storing reproduction orders of the objects. Route information in the index area includes a sequence of addresses of objects whose alignment represents a reproduction order. Chain control information in the index area corresponds to the route information. The chain control information, being effective in reproducing objects specified by the alignment of the sequence of addresses (objects specified by the alignment of the sequence of addresses are called a chain), instructs the reproduction apparatus to have a navigation control of the chain. A piece of moving picture data having a certain time period is reproduced at the same timing as a piece of audio data and a piece of sub-picture data. A piece of sub-control information, being effective in reproducing moving picture data, sub-picture data, and audio data stored in a small unit instructs the reproduction apparatus to have a navigation control of the data stored in the same small unit.